

FORM PTO-1390

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  
 TRANSMITTAL LETTER TO THE UNITED STATES  
 DESIGNATED/ELECTED OFFICE (DO/EO/US)  
 CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY DOCKET NUMBER  
 THOM-0014

U.S. APPLICATION NO (if known see 37 C.F.R. 1.5)

09/857735

INTERNATIONAL APPLICATION NO.  
 PCT/GB00/03699 ✓INTERNATIONAL FILING DATE  
 27 September 2000 ✓PRIORITY DATE CLAIMED  
 12 October 1999 ✓

## TITLE OF INVENTION PLASTICS BAGS AND METHODS OF MAKING THE SAME ✓

## APPLICANT(S) FOR DO/EO/US Murray Edward Bruce LEIGHTON ✓

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1.  This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2.  This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3.  This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4.  A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5.  A copy of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a.  is transmitted herewith (required only if not transmitted by the International Bureau).
  - b.  has been transmitted by the International Bureau.
  - c.  is not required, as the application was filed in the United States Receiving Office (RO/US)
  - d.  A translation of the International Application into English (35 U.S.C. 371(c)(2)).
6.  Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a.  are transmitted herewith (required only if not transmitted by the International Bureau).
  - b.  have been transmitted by the International Bureau.
  - c.  have not been made; however, the time limit for making such amendments has NOT expired.
  - d.  have not been made and will not be made.
7.  A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
8.  An oath or declaration of the inventor(s) 35 U.S.C. 371(c)(4).
9.  A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

## Items 11. to 16. below concern other document(s) or information included:

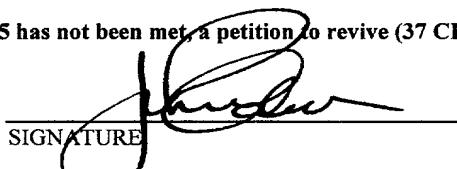
11.  An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12.  An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13.  A **FIRST** preliminary amendment.  
 A **SECOND** or **SUBSEQUENT** preliminary amendment.
14.  A substitute specification.
15.  A change of power of attorney and/or address letter.
16.  Other items or information:
  - A copy of the front page of the Published PCT Application by WIPO under WO 01/26992 and the International Search Report and references cited
  - Associate Power of Attorney

EXPRESS MAIL Mailing Label No. EL 922205779 US

Date of Deposit: June 8, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

MAILER John HillSIGNATURE John Hill

U.S. APPLICATION NO. <b>09/857773</b> (if known 35 CFR 1.55)		INTERNATIONAL APPLICATION NO. PCT/GB00/03699	ATTORNEY DOCKET NUMBER THOM-0014
17. The following fees are submitted: <b>Basic National Fee (37 CFR 1.492(a)(1) - (5)):</b>		CALCULATIONS PTO USE ONLY	
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO.....\$1,000.00			
International preliminary examination fee (37 CFR 1.482 not paid to USPTO but International Search Report has been prepared by the EPO or JPO.....\$860.00			
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO.....\$710.00			
International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4).....\$690.00			
International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4).....\$100.00			
<b>ENTER APPROPRIATE BASIC FEE AMOUNT = \$860.00</b>			
Surcharge of \$130.00 for furnishing the oath or declaration later than <u>20</u> - 30 months from the earliest claimed priority date (37 CFR 1.492(e)).		\$	
Claims	Number Filed	Number Extra	Rate
Total claims	<b>25 - 20 =</b>	5	X \$18.00 <b>\$ 90.00</b>
Independent Claims	<b>3 - 3 =</b>		x \$80.00 \$
Multiple dependent claims(s) (if applicable)		+ \$270.00 \$	
<b>TOTAL OF ABOVE CALCULATIONS = \$950.00</b>			
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by $\frac{1}{2}$ .		\$475.00	
<b>SUBTOTAL = \$475.00</b>			
Processing fee of \$130.00 for furnishing the English translation later the <u>20</u> - 30 months from the earliest claimed priority date (37 CFR 1.492(f)).		+ \$	
<b>TOTAL NATIONAL FEE = \$475.00</b>			
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property		+ \$	
<b>TOTAL FEES ENCLOSED = \$475.00</b>			
		Amount to be: refunded	\$
		charged	\$
<p>a. <input checked="" type="checkbox"/> A check in the amount of <u>\$ 475.00</u> to cover the above fee is enclosed.</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. 23-3050 in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner if hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 23-3050. A duplicate copy of this sheet is enclosed.</p>			
<p><b>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.</b></p>			
<p>SEND ALL CORRESPONDENCE TO:  <b>John W. Caldwell</b>          Woodcock Washburn Kurtz          Mackiewicz &amp; Norris LLP          One Liberty Place - 46th Floor          Philadelphia, PA 19103          (215) 568-3100</p>			
 SIGNATURE <b>John W. Caldwell</b> NAME 28,937 REGISTRATION NUMBER			

DOCKET NO.: THOM-0014

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re patent application of:**

Murray Edward Bruce LEIGHTON

**International Application No.:** PCT/GB00/03699**International Filing Date:** 27 September 2000**For:** PLASTICS BAGS AND METHODS OF MAKING THE SAMEAssistant Commissioner of  
Patents & Trademarks  
Washington, DC 20231

Sir:

**PRELIMINARY AMENDMENT**

Prior to examination of the above-referenced patent application, please make the following amendments and consider the following remarks.

**In the claims:**

Please amend claims 3- 4, 6-7, 9, 12, 14, 18, 20, 24 and 25 as follows:

3. (Amended) A bag according to claim 1, in which the tag is folded to lie within the contour of the bag sides until withdrawn.

4. (Amended) A bag according to claim 1, in which the tag is folded in a generally M-shaped configuration in cross-section, with the outside surfaces of the outside legs of the tag being sealed to the seal and/or to the sides of the bag, and with the inside legs being arranged to be withdrawn from between the outside legs.

6. (Amended) A bag according to claim 4, in which only the outside legs of the tag extending beyond the inside legs are sealed to the seal.

7. (Amended) A bag according to claim 4, in which the tag is provided with a line of weakness along the junction of the inside legs of the tag.

9. (Amended) A bag according to claim 1, in which the tag is made of a laminated material.

12. (Amended) A bag according to claim 1, which has two seals extending parallel to the said margin, one of which is a reclosable zipper seal.

14. (Amended) A bag according to claim 12, in which the zipper seal has marginal flanges extending laterally from interengageable male and female closure members, and the tag is sealed to the inside surfaces of flanges extending from the closure members towards the mouth of the bag.

18. (Amended) A method according to claim 15, which includes folding a length of laminated material into a generally M-shaped configuration in cross-section, and cutting off a section of the folded material to form the tag.

20. (Amended) A method according to claim 15, in which the tag is located on the host material so that the tag lies within the contour of the bag sides when the bag is completed and sealed.

24. (Amended) Tag material according to claim 21, in which the strip also includes a layer of strengthening material between the first and second layers.

25. (Amended) Tag material according to claim 21, in which the strip also includes a layer of heat insulating material between the first and second layers.

**REMARKS**

Early consideration and allowance of the above-referenced patent application is respectfully requested.

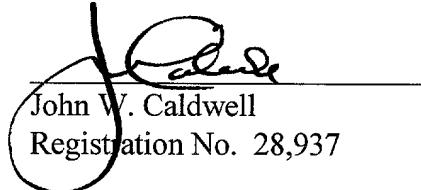
Claims 3-4, 6-7, 9, 12, 14, 18, 20, 24 and 25 have been amended.

No new matter has been entered. None of the amendments are submitted for reasons of patentability.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Respectfully submitted,

Date: *June 8 2001*

  
John W. Caldwell

Registration No. 28,937

WOODCOCK WASHBURN KURTZ  
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**VERSION WITH MARKINGS TO SHOW CHANGES MADE****In the claims:**

Claims 3-4, 6-7, 9, 12, 14, 18, 20, 24 and 25 have been amended as follows:

3. (Amended) A bag according to claim 1 [or 2], in which the tag is folded to lie within the contour of the bag sides until withdrawn.

4. (Amended) A bag according to [any preceding] claim 1, in which the tag is folded in a generally M-shaped configuration in cross-section, with the outside surfaces of the outside legs of the tag being sealed to the seal and/or to the sides of the bag, and with the inside legs being arranged to be withdrawn from between the outside legs.

6. (Amended) A bag according to claim 4 [or 5], in which only the outside legs of the tag extending beyond the inside legs are sealed to the seal.

7. (Amended) A bag according to claim 4, [5 or 6,] in which the tag is provided with a line of weakness along the junction of the inside legs of the tag.

9. (Amended) A bag according to [any preceding] claim 1, in which the tag is made of a laminated material.

12. (Amended) A bag according to [any preceding] claim 1, which has two seals extending parallel to the said margin, one of which is a reclosable zipper seal.

14. (Amended) A bag according to claim 12 [or 13], in which the zipper seal has marginal flanges extending laterally from interengageable male and female closure members, and the tag is sealed to the inside surfaces of flanges extending from the closure members towards the mouth of the bag.

18. (Amended)A method according to claim 15, [16 or 17,] which includes folding a length of laminated material into a generally M-shaped configuration in cross-section, and cutting off a section of the folded material to form the tag.

20. (Amended)A method according to [any of] claim[s] 15 [to 19], in which the tag is located on the host material so that the tag lies within the contour of the bag sides when the bag is completed and sealed.

24. (Amended)Tag material according to claim 21, [22 or 23,] in which the strip also includes a layer of strengthening material between the first and second layers.

25. (Amended)Tag material according to [any of] claim[s] 21 [to 24], in which the strip also includes a layer of heat insulating material between the first and second layers.

PLASTICS BAGS AND METHODS OF MAKING THE SAME

This invention relates generally to plastics bags, and particularly to plastics bags which have been formed, filled and sealed. The invention is also concerned with methods of manufacturing such bags to incorporate means by which they can easily be opened. The invention is also concerned with tag material used as a means to facilitate the opening of such bags.

10 Plastics bags which have been formed, filled and sealed are often difficult to open because of the effectiveness of the seal. In many cases, the pulling force needed on the sides of the bag to open the top seal is substantial.

It is an object of the present invention to provide means 15 for more easily opening sealed bags, especially those which have been formed, filled with contents and sealed.

It is also an object of the present invention to provide a method of manufacturing a plastics bag to incorporate means for easy opening.

20 In accordance with one aspect of the present invention there is provided a plastics bag comprising a pair of sides defining an openable mouth along one margin of the sides, a seal extending parallel to said margin to close the sides, and a tag within a part of the seal which can be withdrawn and 25 used to open a zone of the seal to permit access to the interior of the bag.

Preferably, the tag is positioned substantially centrally of the said margin of the bag.

Preferably, the tag is folded to lie within the contour 30 of the bag sides until withdrawn.

In a preferred embodiment, the tag is folded in a

generally M-shaped configuration in cross-section, with the outside surfaces of the outside legs of the tag being sealed to the seal and/or to the sides of the bag, and with the inside legs being arranged to be withdrawn from between the 5 outside legs.

It is of assistance if the inside surfaces of the outside legs of the tag are in peel seal engagement with the outside surfaces of the inside legs of the tag in said M-shaped configuration.

10 The tag is preferably provided with a line of weakness, e.g. perforations, along the junction of the inside legs of the tag.

In a preferred embodiment, the bag has two seals extending parallel to the said margin, one of which is a 15 reclosable zipper seal.

Preferably, the zipper seal has marginal flanges extending laterally from interengageable male and female closure members, and the tag is sealed to the inside surfaces of flanges extending from the closure members towards the 20 mouth of the bag.

In accordance with another aspect of the present invention there is provided a method of manufacturing a plastics bag which includes providing a seal parallel to a margin of a bag which defines an openable mouth, and 25 incorporating into a part of the seal a tag which can be withdrawn and used to open a zone of the seal to permit access to the interior of the bag.

In one preferred method, the method includes sealing the tag to flanges of a reclosable zipper seal having 30 interengageable male and female closure members, sealing the zipper seal and tag to a host material which is to form the

sides of the bag, forming the bag, and creating a second seal parallel to said margin, on the side of the zipper seal which is closer to the mouth of the bag, with the tag extending through the second seal.

5 In an alternative method, the method includes sealing the tag to a host material which is to form the sides of the bag, forming the bag, and creating the seal parallel to said margin with the tag extending through the seal.

It will therefore be appreciated that the present 10 invention can be used both with bags which incorporate a reclosable zipper seal along with the top seal, and also with bags which have a top seal only.

Also in accordance with the invention there is provided tag material comprising an elongate strip comprising a first 15 layer having an outside surface suitable to be sealed to a web of plastics material and a second layer having an outside surface having peel-seal properties, wherein the strip is folded about its longitudinal axis into a generally M-shaped configuration with the first layer on the outside and with the 20 outer legs of the folded strip extending beyond the tuck.

The tag which is used as the agent by which the seal can be broken and the bag opened is preferably a piece of laminated material. The laminated material preferably comprises an outer layer to be sealed to the host film, a 25 layer to provide the tag with strength, a layer to provide the tag with thermal insulation and a peel seal layer.

The method of manufacturing a bag in accordance with the invention is particularly appropriate for use with a zipper strip applied transversely to the direction of advance of the 30 host material, i.e. using cross-web technology.

In order that the invention may be more fully understood,

a number of presently preferred embodiments will now be described by way of example and with reference to the accompanying drawings. In the drawings:

Fig. 1 shows the structure of a laminated material 5 suitable for use as a tag in accordance with the present invention;

Fig. 2 shows the laminated material folded to make a tag;

Fig. 3 is a sectional view showing the insertion of a folded tag into a zipper strip;

10 Fig. 4 shows the zipper strip and tag sealed to a host material;

Fig. 5 shows a modified embodiment where just the folded tag is sealed to the host material;

15 Fig. 6 is a schematic view of a sealing jaw construction on a form-fill-seal machine for use in the method according to the present invention;

Fig. 7 is a front view of a bag in accordance with the invention provided with a top seal, a zipper seal and a tag;

Fig. 8 is a top view of the bag of Fig. 7;

20 Fig. 9 shows the bag of Fig. 7 with the tuck of the tag withdrawn;

Fig. 10 shows the bag of Fig. 9 with the tag opened; and

Fig. 11 is a front view of a bag in accordance with the invention provided with just a top seal and a tag.

25 Referring first to Fig. 1 there is shown a laminated material 10 for use in making tags for use in bags in accordance with the invention. The material 10 comprises an outer layer 12 of a material suitable to be sealed to a host material, i.e. a plastics film. One suitable material is 30 polyethylene. Next to the polyethylene layer 12 is a layer 14 to give the laminate strength. This can be of polyethylene

terephthalate (PET) material. There is then a layer 16, for example of foil material, to give the laminate heat insulation properties. Next to this layer is a layer 18 of material which has peel seal properties. These layers are bonded 5 together. A line of perforations 20 is provided centrally along the length of the laminate material to provide a line of weakness. These perforations can be holes or slits through the laminate.

The laminate material 10 can be stored on a roll. The 10 laminate material is folded, as shown in Fig. 2, substantially into an "M" shape, with two outer legs 13a, 13b and two inner legs 15a, 15b which form an inner tuck. In Fig. 2 is shown an embodiment of tag material which has only the two layers 12 and 18. Each of the intermediate layers 14 and 16 of Fig. 15 1 can be regarded as optional, although desirable. The outer legs extend down beyond the tuck and the line of perforations 20 is then at the bottom of the tuck, i.e. at the junction of the inner legs 15a, 15b. The material can be stored on a roll already doubled over about the perforation line 20 and with 20 the tuck folded in and with the peel seal layer surfaces which are then facing one another welded together. The facing surfaces of peel seal material are sealed together, as represented by the "crosses" in Fig. 3. Alternatively, the peel seal layer surfaces can be welded together at a 25 subsequent stage in the manufacture of the bag.

A section of the folded laminated material 10 is fed into an applicator and is cut to length to make a tag 17. Adhesive is then applied to the outer faces 19 of the outer layer 12 in the region of the outer legs 13a, 13b which extend beyond 30 the tuck and the tag 17 is then inserted between the top flanges 22 of a cross web zipper 24 as shown in Fig. 3. The

adhesive thus sticks the tag 17 to the zipper 24.

In one embodiment of form-fill-seal machine, the zipper 24 and tag 17 are then sealed jointly to the host material 26 as shown in Fig. 4. The host material 26 is a length of 5 plastics film or web from which the bag is to be made. They can be applied to the film using a cross web technique, and sealed in position. This is done if the bag is to have both a top seal and a zipper seal.

If the final bag is not to include a zipper seal, but 10 only a top seal, then the folded tag 17 is not affixed to a zipper strip as shown in Fig. 3, but is sealed by itself to the host material 26, as shown in Fig. 5. The tags 17 are positioned at appropriate intervals along the length of the advancing host material 26.

15        The host material 26 carrying the zippers and tags (Fig. 4), or the tags alone (Fig. 5), is then run as normal through a form-fill-seal machine including passage over a forming shoulder. Fig. 6 shows the sealing jaw construction used to seal the bag after filling when the bag is to incorporate both 20 a zipper seal and a top seal. The sealing jaw construction comprises upper sealing jaws 28 and zipper sealing jaws 30. The upper jaws 28 incorporate impulse or resistance heating means in their facing surfaces 29 to effect the required top seal. The web material 26 is thereby sealed to itself along 25 the greater part of the width of the bag, but in the area of the tag 17 the web material 26 is sealed to those parts of the outside surfaces of the outer legs 13a, 13b of the tag which are in alignment with the tuck. Similarly, the lower jaws 30 effect the sealing of the zipper seal flanges to the web 30 material 26. The jaws also incorporate a knife 32 to sever the bags. In Fig. 5 there is indicated a spacing x. This

is the minimum distance required to incorporate the tag. Upon the top end seal of the bag being made by the jaws 28, the tag 17 protrudes through the seal with the outer portions of the tag sealed to the host film. This is illustrated in Fig. 7 5 which shows the bag construction. Here there is a top seal 34 and a zipper seal 36 and a bottom seal 38. The tag is sandwiched between the webs of the film and the distance between the top seal 34 and the top end of the bag is again  $x$  as in Fig. 6. This distance  $x$  can be approximately 5 10 millimetres.

If the bag incorporates no zipper seal 36, but only a top seal 34, then the tag 17 will simply protrude from the top seal 34, as shown in Fig. 11.

Fig. 8 shows a top view of the bag with the tag 17 in the 15 centre of the seal.

In order to open the sealed bag the tucked-in portion of the tag is pulled up by a finger as shown in Fig. 9, with the peel seals opening. This creates a protruding loop. A finger can then be inserted into the loop of the tag to break the 20 perforations 20. This creates two protruding flaps. When the two flaps of the tag which are thus created are pulled apart the peel seal material of the tag overlaid by seal 34, and by seal 36 if present, will give, allowing entry to the inside of the bag through the opened tag, as shown in Fig. 10. The 25 opening of the peel seal material gives an access hole through the top seal 34, and through the zipper seal 36 if provided, directly to the interior of the bag. The opening can then be enlarged.

## CLAIMS:

1. A plastics bag comprising a pair of sides defining an openable mouth along one margin of the sides, a seal extending parallel to said margin to close the sides, and a 5 tag within a part of the seal which can be withdrawn and used to open a zone of the seal to permit access to the interior of the bag.

2. A bag according to claim 1, in which the tag is positioned substantially centrally of the said margin of the 10 bag.

3. A bag according to claim 1 or 2, in which the tag is folded to lie within the contour of the bag sides until withdrawn.

4. A bag according to any preceding claim, in which the 15 tag is folded in a generally M-shaped configuration in cross-section, with the outside surfaces of the outside legs of the tag being sealed to the seal and/or to the sides of the bag, and with the inside legs being arranged to be withdrawn from between the outside legs.

20 5. A bag according to claim 4, in which the inside surfaces of the outside legs of the tag are in peel seal engagement with the outside surfaces of the inside legs of the tag in said M-shaped configuration.

6. A bag according to claim 4 or 5, in which only the 25 outside legs of the tag extending beyond the inside legs are sealed to the seal.

7. A bag according to claim 4, 5 or 6, in which the tag is provided with a line of weakness along the junction of the inside legs of the tag.

30 8. A bag according to claim 7, in which the line of weakness comprises a row of perforations.

9. A bag according to any preceding claim, in which the tag is made of a laminated material

10. A bag according to claim 9, in which the laminated material comprises at least three layers.

5 11. A bag according to claim 10, in which the laminated material comprises four layers, a first layer of a material which is sealable to a plastics film, a second layer of a relatively strong material, a third layer which has heat insulating properties and a fourth layer of peel seal  
10 material.

12. A bag according to any preceding claim, which has two seals extending parallel to the said margin, one of which is a reclosable zipper seal.

13. A bag according to claim 12, in which the reclosable  
15 zipper seal is on the inside in relation to the other seal, and the tag is located within both seals.

14. A bag according to claim 12 or 13, in which the zipper seal has marginal flanges extending laterally from interengageable male and female closure members, and the tag  
20 is sealed to the inside surfaces of flanges extending from the closure members towards the mouth of the bag.

15. A method of manufacturing a plastics bag which includes providing a seal parallel to a margin of a bag which defines an openable mouth, and incorporating into a part of  
25 the seal a tag which can be withdrawn and used to open a zone of the seal to permit access to the interior of the bag.

16. A method according to claim 15, which includes sealing the tag to flanges of a reclosable zipper seal having interengageable male and female closure members, sealing the  
30 zipper seal and tag to a host material which is to form the sides of the bag, forming the bag, and creating a second seal

parallel to said margin, on the side of the zipper seal which is closer to the mouth of the bag, with the tag extending through the second seal.

17. A method according to claim 15, which includes 5 sealing the tag to a host material which is to form the sides of the bag, forming the bag, and creating the seal parallel to said margin with the tag extending through the seal.

18. A method according to claim 15, 16 or 17, which includes folding a length of laminated material into a 10 generally M-shaped configuration in cross-section, and cutting off a section of the folded material to form the tag.

19. A method according to claim 18, which includes providing a line of weakness along the junction of the inside legs of the tag.

15 20. A method according to any of claims 15 to 19, in which the tag is located on the host material so that the tag lies within the contour of the bag sides when the bag is completed and sealed.

21. Tag material comprising an elongate strip comprising 20 a first layer having an outside surface suitable to be sealed to a web of plastics material and a second layer having an outside surface having peel-seal properties, wherein the strip is folded about its longitudinal axis into a generally M-shaped configuration with the first layer on the outside and 25 with the outer legs of the folded strip extending beyond the tuck.

22. Tag material according to claim 21, in which a line of weakness is provided along the length of the strip so as to be located at the apex of the tuck when folded.

30 23. Tag material according to claim 22, in which the line of weakness comprises a row of perforations through the

strip.

24. Tag material according to claim 21, 22 or 23, in which the strip also includes a layer of strengthening material between the first and second layers.

5 25. Tag material according to any of claims 21 to 24, in which the strip also includes a layer of heat insulating material between the first and second layers.

ABSTRACTPLASTICS BAGS AND METHODS OF MAKING THE SAME

A plastics bag has at least one seal (34, 36) extending parallel to the mouth of the bag to close the sides. 5 Preferably, a reclosable zipper seal (36) is provided below a top seal (34). A novel tag is provided, secured to the zipper seal (36) and extending through the top seal (34). The tag (11) is generally M-shaped in cross-section with its outside legs secured to the seals and with an inner tuck which 10 the consumer can withdraw from the mouth of the bag and break open to make an access hole through the seal or seals into the interior of the bag to facilitate full opening of the mouth of the bag. Methods of manufacturing such bags are also described, particularly for use with form-fill-seal machines.

15

(Fig. 7)

1 / 2

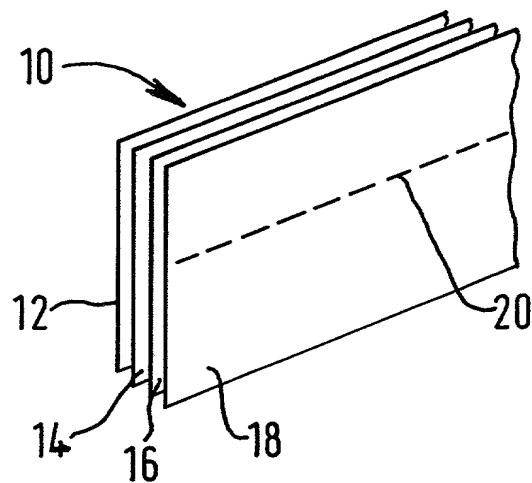


FIG. 1.

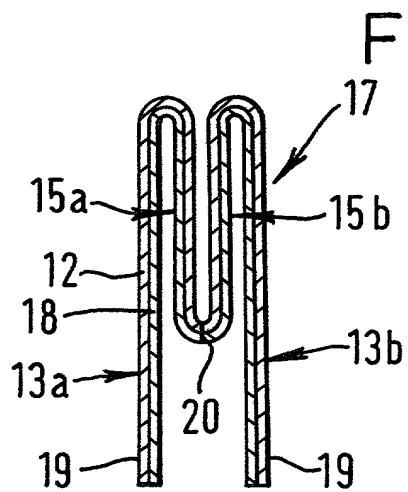


FIG. 2.

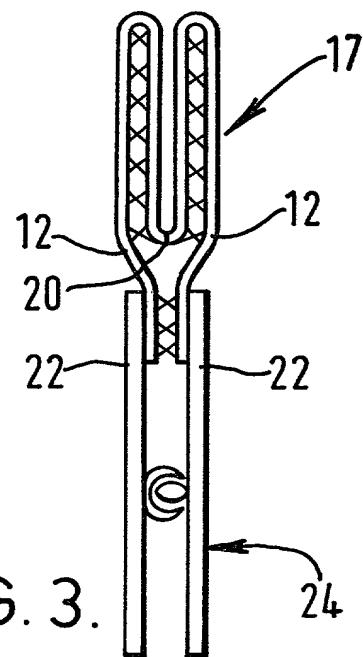


FIG. 3.

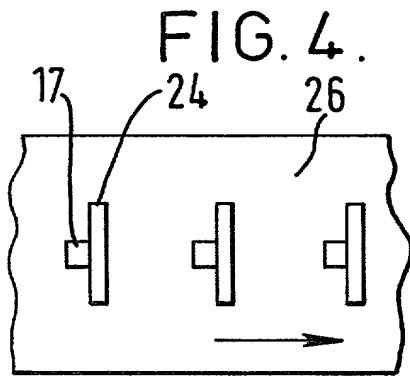


FIG. 4.

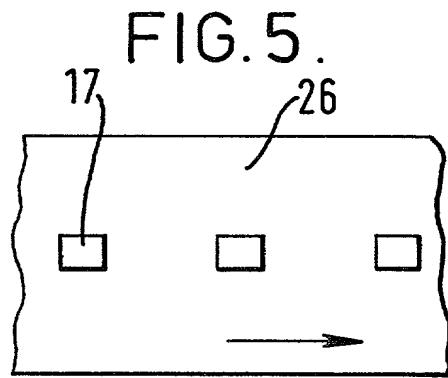


FIG. 5.

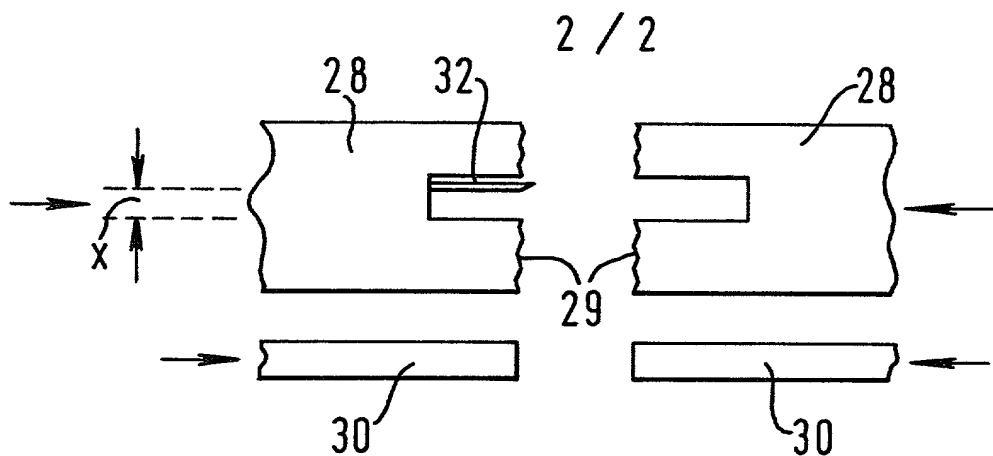


FIG. 6.

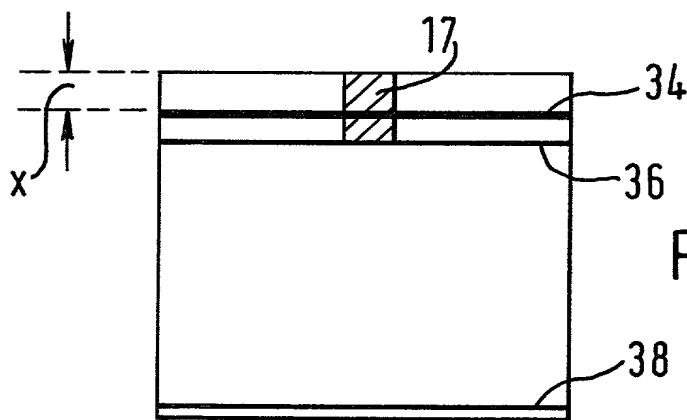


FIG. 7.

FIG. 8.

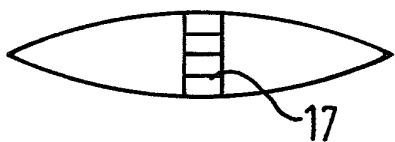


FIG. 9.

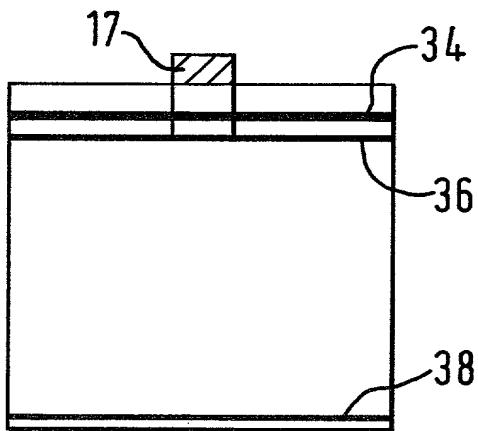
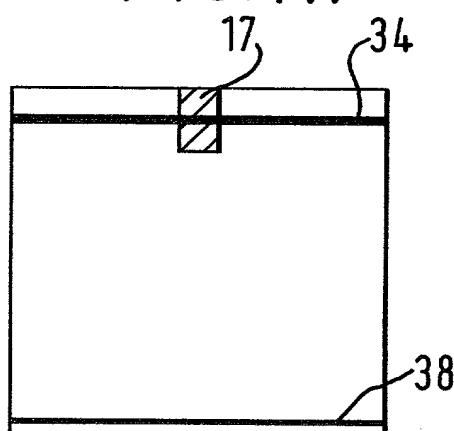


FIG. 11.



THOM-0014

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In Re Application of:**

**Murray Edward Bruce LEIGHTON**

**Group Art Unit: Not yet known**

**International Serial No. PCT/GB00/03699**

**Examiner: Not yet assigned**

**International Filing Date: 27 September 2000**

**For: PLASTICS BAGS AND METHODS OF  
MAKING THE SAME**

**DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; and

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a

Utility Patent       Design Patent

is sought on the invention, whose title appears above, the specification of which:

- is attached hereto.
- was filed on 27 September 2000 as International Patent Application Serial No. PCT/GB00/03699.
- said application having been amended on \_\_\_\_\_.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to the patentability of this application in accordance with 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a-d) of any **foreign application(s)** for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of any application on which priority is claimed:

<b>Priority Claimed (If X'd)</b>	<b>Country</b>	<b>Serial Number</b>	<b>Date Filed</b>
<input checked="" type="checkbox"/>	UK	GB 9923986.5	12 October 1999
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

<b>Serial Number</b>	<b>Date Filed</b>	<b>Patented/Pending/Abandoned</b>
_____	_____	_____
_____	_____	_____
_____	_____	_____

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

<b>Serial Number</b>	<b>Date Filed</b>
_____	_____
_____	_____
_____	_____

I hereby appoint the following persons of the firm of **WOODCOCK WASHBURN KURTZ**  
**MACKIEWICZ & NORRIS LLP**, One Liberty Place - 46th Floor, Philadelphia,  
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1- John W. Caldwell Reg. No. 28,937

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

<p>1-00</p> <p><b>Name:</b> <u>Murray Edward Bruce LEIGHTON</u></p>	 <b>Signature</b>
<p><b>Mailing Address:</b> 20A York Road Harrogate Yorkshire HL1 5HZ England</p>	<p><b>Date of Signature:</b> <u>23.05.01</u></p>
<p><b>City/State of Actual Residence:</b> <u>Harrogate, England</u> <u>ENG</u></p>	<p><b>Citizenship:</b> <u>United Kingdom</u> ✓</p>

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## In Re Application of:

Murray Edward Bruce LEIGHTON

Intl. Appln. No.: PCT/GB00/03699

Group Art Unit: not yet known

Intl. Filing Date: 27 September 2000

Examiner: not yet assigned

For: PLASTICS BAGS AND METHODS OF  
MAKING THE SAMEAssistant Commissioner for Patents  
Washington DC 20231

Sir:

## ASSOCIATE POWER OF ATTORNEY

The undersigned, of the firm WOODCOCK WASHBURN KURTZ  
MACKIEWICZ & NORRIS LLP, One Liberty Place - 46th Floor, Philadelphia, Pennsylvania  
19103, Attorney and/or Agents for Applicant(s), hereby appoints the following:

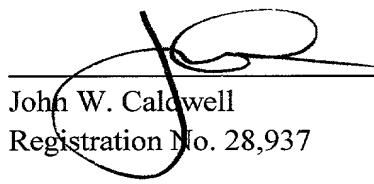
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his/her associates with full power to prosecute the above-identified application and to transact all business in the Patent Office connected therewith and requests that correspondence continue to be directed to the firm of WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS LLP at the above address.

Date:

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